CLAIMS

What is claimed is:

1. In an air-consuming system, said air-consuming system having a compressed-air generating device including an air compressor, an electric motor for powering said air compressor and an air dryer, a pressure port for at least one of pressurizing and venting said air-consuming system, an air inlet for sucking air from the atmosphere, said air inlet in communication with said air compressor and an intake device, an air outlet for discharge of air-dryer regeneration air to atmosphere, said air outlet in communication with said air dryer and a venting device, said intake device including a first air line in communication with an outlet of an air filter, a third air line extending from an inlet of said air filter to atmosphere for passing air sucked from atmosphere through said air filter to said outlet of said air-filter and to said air inlet of said air compressor, said venting device including a second air line leading from said outlet associated with said air dryer to said outlet of said air filter and said third air line, and a pneumatic coupling device disposed proximate to said outlet of said air filter pneumatically connecting said intake device and said venting device, a muffler formed as said third air line constructed and arranged to damp sound emissions from said compressed-air generating device.

2. The muffler of claim 1, wherein said muffler is a compact preassembled unit, and is coupled to said air-consuming system by at least one of slip-on joints and clamp joints.

3. The muffler of claim 1, wherein at least one of said first air-line, said second air-line, and said third air-line is formed by mandrel-sleeve-joint technique with a different one of said first air-line, said second air-line, and said third air-line.

4. The muffler of claim 1, wherein said third air-line is an elastic hose connection including an air-permeable, sound-absorbing insulating material.

5. The muffler of claim 4, wherein said third air line includes a throttle device adapted to narrow said third air-line in the region between said sound-absorbing insulating material and outlet to atmosphere.

6. The muffler of claim 4, wherein said sound-absorbing insulating material is formed from a meshed fabric of interconnected thermoplastic threads.

7. The muffler of claim 6, wherein said sound-absorbing insulating material is shaped as a knitted-fabric roll.

8. In an air-consuming system, said air-consuming system having a compressed-air generating device including an air compressor, an electric motor for powering said air compressor and an air dryer, a pressure port for at least one of pressurizing and venting said air-consuming system, an air inlet for sucking air from the atmosphere, said air inlet in communication with said air compressor and an intake device, an air outlet for discharge of air-dryer regeneration air to atmosphere, said air outlet in communication with said air dryer and a venting device, said intake device including a first air line in communication with an outlet of an air filter, a third air line extending from an inlet of said air filter to atmosphere for passing air sucked from atmosphere through said air filter to said outlet of said air-filter and to said air inlet of said air compressor, said venting device including a second air line leading from said outlet associated with said air dryer to said outlet of said air filter and said third air line, and a pneumatic coupling device disposed proximate to said outlet of said air filter pneumatically connecting said intake device and said venting device, a multi-functional muffling unit including said air filter and a muffler constructed and arranged to damp sound emissions from said compressed-air generating device.

9. The multi-functional muffling unit of claim 8, wherein said multi-functional muffling unit is a compact preassembled unit, and is coupled to said air-consuming system by at least one of slip-on joints and clamp joints.

10. The multi-functional muffling unit of claim 8, wherein at least one said first air-line, said second air-line, and said third air-line is formed by mandrel-sleeve-joint technique with a different one of said first air-line, said second air-line, and said third air-line.

11. The multi-functional muffling unit of claim 8, wherein said third air line includes a throttle device adapted to narrow said third air-line in the region between said multi-functional unit and outlet to atmosphere.

12. The multi-functional muffling unit of claim 8, wherein said air filter includes an air-permeable paper filter element and said muffler includes an air-permeable, sound-absorbing insulating material.

13. The multi-functional muffling unit of claim 12, wherein said sound-absorbing insulating material is formed from a meshed fabric of interconnected thermoplastic threads.

14. The multi-functional muffling unit of claim 13, wherein said sound-absorbing insulating material is shaped as a knitted-fabric roll.